

Nunez Community College Master Syllabus

CHEM 1110: General Chemistry I Laboratory

Division:	Health and Natural Science Division
Last Revised:	February 20, 2008
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EVALUATION OF INSTRUCTION

Each class at the College is evaluated by the students during the semester. The instrument used allows students to comment on the instructor and his presentation of the course. The results of these evaluations are made available to the instructor after grades are complete and turned in to the Division.

The Dean of the Division or his designee visits classes to observe instructors and completes an evaluation. A copy is given to the instructor with the opportunity for the instructor to respond to the evaluation. The evaluation with the instructor's response is kept on file in the Dean's office.

COURSE DESCRIPTION:

CHEM 1110 General Chemistry I (0-3-1). This accompanying laboratory emphasizes basic calculations and equations, laboratory safety, and fundamental chemical operations. Lab fee. Corequisite: CHEM 1100.

REQUIRED MATERIALS

Text: Chang, Raymond. 2007. *Chemistry, Ninth Edition*. McGraw-Hill, New York, NY.

(ISBN: 9780073301709)

Calculator Bound notebook 2Mb flash drive/memory stick

Safety goggles are provided.

STUDENT LEARNING OUTCOMES

It is the goal of this course that the student comprehends major concepts in chemistry and will possess basic chemical laboratory skills. Upon completion of this course, the student will be able to:

- 1. Demonstrate safety awareness and carry out chemical procedures with safety foremost,
- 2. Conduct mass and volume measurements with precision,
- 3. Use and manipulate chemical equipment common to the chemistry laboratory,
- 4. Apply mathematical calculations to experimental data,
- 5. Understand how chemical principles are applied,
- 6. Use the scientific method and deductive reasoning to interpret observations,
- 7. Graph experimental data,
- 8. Write a scientific laboratory report.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Daily quizzes will include be based on material taken from laboratory handouts from the beginning of the course to the handout for the experiment of the day. Students are expected to record their observations for each laboratory and complete any calculations and graphs generated by the data.

These observations should be recorded in your laboratory notebook for periodic evaluation by the instruction. One complete, formal laboratory report will be required.

CONTENT OUTLINE

Week

Topic

- 1 Safety practices in the laboratory
- 2 Metric measurements of liquids and solids
- 3 Classifying matter by properties
- 4 Density measurements of liquids and solids
- 5 Preparation of solutions
- 6 Measurement of a salt solution
- 7 Chemical composition of hydrates
- 8 Reactions of copper
- 9 Reduction/oxidation reactions
- 10 Determining pH of common liquids
- 11 Acid/base titrations
- 12 Analysis of aspirin
- 13 Identification of an unknown
- 14 Gas laws

GRADING

The grading scale used will be: A = 90-100%, B = 80-89%, C = 65-79%, D = 50-64%, and F = 0-49%. It is anticipated that the total number of points possible will be distributed as follows:

Formal laboratory report 100
Quizzes and other assignments 300
Safety and calculations test 100
Total 500

ATTENDANCE

Students should read the policy on attendance in the <u>Nunez College Catalog</u>. Roll will be checked each class and the instructor will drop a student for excessive unexcused absences prior to the

official last day to drop a course. If the instructor drops a student from the roster before the last drop date, the student will receive a "W" grade. If absences occur and/or accumulate after the last day to officially withdraw, the student will fail the course.

CLASSROOM ETIQUETTE

- 1. An instructor must be present in the laboratory for a student to enter and stay in the laboratory.
- 2. No food or drinks are allowed in class.
- 3. Safety goggles always must be worn in the laboratory,
- 4. Clothing should be selected with safety in mind,
- 5. Shoes should have closed toes, flat heels and rubber soles,
- 6. All cell phones must be turned off prior to entering class.
- 7. No head-sets may be used in the laboratory.
- 8. No children are allowed in class.
- 9. All assignments must be turned in complete and on time. There are no make-ups.

PLAGIARISM AND CHEATING

Cheating/plagiarizing is a serious offense. Webster defines plagiarism as the act of "taking and using as one's own the ideas or writings of another." Depending on the frequency or severity of a student's cheating/plagiarizing the instructor may lower the student's grade or recommend the student to the Vice Chancellor for Academic Affairs for disciplinary action.

AMERICANS WITH DISABILITIES ACT

It is the policy of Nunez Community College to accommodate students with disabilities, pursuant to federal law, state law, and the school's commitment to equal educational opportunities. Any student with a disability who needs accommodations should contact Carly Gervais in the ADA Coordinator's Office. The office is located in the Law Library, Room 1-234, telephone 278-7491 or e-mail cgervais@nunez.edu.